

WHAT IS CLAIMED IS:

1. A digital camera having an imaging device for sensing the image of a subject using a solid-state image sensor and outputting image data representing the image of the subject, and an imaging lens for forming the image of the subject on a photoreceptive surface of the solid-state image sensor, comprising:

a dust position detector operative in a dust detection mode for detecting the position of dust on an image, which is represented by image data output from the imaging device, on the basis of image data output from the imaging device;

a storage device for storing the dust position detected by said dust position detector; and

a correction unit operative in an image sensing mode for correcting for the image of the dust, at the position stored in said storage device, in the image of the subject represented by the image data output from the imaging device.

2. The digital camera according to claim 1, wherein the imaging lens is detachable from said digital camera;

said storage device stores the dust position, which has been detected by said dust position detector, in association with magnification of the imaging lens; and

in the image sensing mode, said correction unit corrects for the image of dust at the position conforming to the magnification of the imaging lens that has been mounted.

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3. The digital camera according to claim 2, wherein a diaphragm has been provided in front the solid-state image sensor;

5 said storage device stores the dust position, which has been detected by said dust position detector, in association with a combination of an f-stop number of the diaphragm and the magnification of the imaging lens; and

10 in the image sensing mode, said correction unit corrects for the image of dust at the position conforming to the combination of the f-stop number and magnification of the imaging lens.

4. A method of controlling operation of a digital camera having an imaging device for sensing the image of a subject using a solid-state image sensor and outputting image data representing the image of the subject, and an imaging lens for forming the image of the subject on a photoreceptive surface of the solid-state image sensor, the method comprising the steps of:

20 detecting, in a dust detection mode, the position of dust on an image, which is represented by image data output from the imaging device, on the basis of image data output from the imaging device;

storing the detected dust position; and

25 correcting, in an image sensing mode, the image of the dust at the stored position in the image of the subject represented by the image data output from the imaging device.

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